

**Jeopardy Assessment**  
for the Proposed Incidental Taking Authorization  
of the Butler's Garter Snake (*Thamnophis butleri*)

South Milwaukee School District,  
Milwaukee County, Wisconsin

**Background**

The state-threatened Butler's garter snake (*Thamnophis butleri*) is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

**Jeopardy Assessment**

The proposed South Milwaukee School District (SMSD) project is anticipated to result in the incidental taking of Butler's gartersnake and their habitats. The department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part because the population will be sustained at this site in a permanently protected preserve.

**Conservation Measures**

SMSD completed, and the DNR approved, a Conservation Plan for the Butler's gartersnake that outlines SMSD's commitments to implement conservation measures that will minimize any adverse effects on the state threatened species. A habitat reserve has been established on site and a conservation plan has been developed to avoid or minimize take. The conservation plan identifies a strategy for determining snake

usage within the habitat reserve and calls for the development and implementation of a habitat restoration and management plan to increase the suitability of this previously disturbed site to support a Butler's gartersnake population. We anticipate that these improvements and long-term habitat commitments will provide the Butler's gartersnake with a permanent refuge.